

REMARKS/ARGUMENTS

Claims 1-10, and 12-22 are pending in the application. Claim 23 is withdrawn.

In the Drawings:

The drawings are objected to as not showing the features/limitations recited in claims 9 and 20. The Applicant respectfully traverses the objection.

Claims 9 and 20 require:

wherein the base (44) of the insert (42) is shaped like a number, corresponding to the number of circular cross-sectioned through holes, of overlapping solid cylinders (44a, 44b) arranged side by side with their axes parallel (emphasis added)

Since the Applicant suspects the rejection is due to a misreading of the two claims, he points out that it is not claimed/required that the base is shaped like the numeral "2" or any other numeral. See Specification Para. 0019. Rather, claims 19 and 20 could have been written and can be read as:

wherein the base (44) of the insert (42) is shaped like a number of overlapping solid cylinders (44a, 44b), [the number of overlapping solid cylinders] corresponding to the number of circular cross-sectioned through holes, and arranged side by side with their axes parallel

This arrangement is exactly that shown in Figures 2 and 4 where base 44 of insert 42 is shown composed of two overlapping solid cylinders 44a/44b arranged side by side with parallel axes, which number (two) of overlapping cylinders corresponds to the number of circular cross sectioned through holes 40a/40b shown in figure 4.

Therefore, the Applicant submits that the drawings do not require correction and that the features specified in claims 19 and 20 are depicted in the drawings.

In the Claims:

37 CFR 1.75(c) Objection to Claim 4:

Claim 4 is objected to as being of improper independent form for reciting exactly the same limitation as independent claim 1 from which it depends. The Applicant respectfully traverses the objection. Claim 1 claims a through hole 40

composed of “at least two overlapping axially offset circular cross-sectioned through holes (40a, 40b)” (emphasis added), while claim 4 requires exactly “two overlapping axially offset circular cross-sectioned through holes (40a, 40b).” This is a sufficient distinction to constitute a properly dependant claim and no correction should be required.

35 USC §103(a) Rejection As Unpatentable Over US 5,016,892 to Lafforgue

Claims 1-5, 7, 9, 10, 12-18, 20 and 21 stand rejected under 35 USC 103(a) as unpatentable over US 5,016,892 to Lafforgue. The Applicant respectfully traverses this rejection of the three relevant independent claims and the associated dependent claims.

Independent claim 1 requires:

that the second through hole (40) is formed by at least two overlapping axially offset circular cross-sectioned through holes (40a, 40b) and the corresponding insert has a base (44) shaped to fit the second through hole (40).

Independent claim 12 requires:

that the second through hole (40) is formed by at least two overlapping axially offset circular cross-sectioned through holes (40a, 40b).

Independent claim 17 requires:

a tubular tool holder body including a radially inward facing surface and a radially outward facing surface and formed with a through hole formed by at least two overlapping axially offset circular cross-sectioned through holes

The Examiner admits that Lafforgue ‘892¹ does not disclose that its through hole is formed by at least two overlapping axially offset circular cross sectioned through holes, but the Examiner asserts that the claimed shape “would have been an obvious matter of design choice.” Furthermore, the Examiner asserts that Applicant has not disclosed that the particular shape of the through hole and matching insert provide an advantage and is used for a particular purpose or solves a stated problem.

¹ US 5,016,892 to Lafforgue is the US counterpart to Applicant's admitted prior art EP 335,795 disclosed and distinguished at Specification Para. 0006.

Firstly, the Applicant notes that the Specification identifies problems with the driving elements of prior art tool holders (Specification Para.s 2-7) and states that the object of the invention is to provide a tool holder that is "wear resistant, robust and enable[s] a simple construction of the tool holder." Specification Para. 8. The Specification goes on to repeatedly identify how the claimed overlapping circle/cylinder shape of its through hole is easy to drill and solves the identified problem by providing a simple to manufacture and cost effective tool holder. Specification Para.s 13 and 16.

Secondly, the Applicant respectfully notes that the Examiner has misapprehended the object of the invention when he states that "[o]ne of ordinary skill in the art ... would have expected the driving insert/through hole combination of Lafforgue et al. '892, and Applicant's driving insert/thorough hole combination to perform equally well ... because both shapes would proved the required surface area contact to transmit a high torque to the drive tool." Action Page 4 lines 8-14. The object of the Applicant's claimed shape is not adequate surface area for torque transmission, but (among other goals) simplicity of construction. Indeed, it is on just that point that the Specification distinguishes the counterpart EP 335,795 by noting that Lafforgue's "elongated truncated cone" shape to its cavity 2 and drive means 3 (Lafforgue '892 col. 2 lines 53-57) "is of complex shape and relatively difficult to machine." Specification Para. 6.

Lastly, The Applicant respectfully notes that Lafforgue '892 teaches away from the claimed shape for the through hole and associated driver insert, and away from the modification suggested by the Examiner. As noted by the Specification at Para. 6, in Lafforgue '892 the "tapering of the recess prevents the insert from falling into the inside of the tool holder body." See Lafforgue '892 Col. 2 lines 61-68 regarding the interaction of ball 6, 6' and cavities 2, 2'. Moreover, Lafforgue's elongated frustoconical drive means 3 is intended to be a selectively interchangeable with ball 6 and to fit, without play, into the existing tapered cavity 2 of tool holder 1. Lafforgue Col. 3 lines 28-38. Therefore, Lafforgue's elements can not simply be replaced by the Applicant's through hole and insert and Lafforgue teaches away from the modification suggested by the Examiner.

35 USC §103(a) Rejection of Dependent Claim 6 and Independent Claim 22 As Unpatentable Over US 5,016,892 to Lafforgue In View Of US 4,206,820 to Bailey.

Dependent claim 6 and independent claim 22 stand rejected under 35 USC 103(a) as unpatentable over Lafforgue '892 in view of Bailey '820. According to the Examiner "[i]n view of this teaching of Bailey et al. '820, it would have been obvious ... to modify the tool holder of Lafforgue et al. '892 to include a press fitted connection between the insert and through hole as taught by Bailey et al. '820 to ensure the driving connection would be without play, thus improving the driving efficiency and durability." Action Para 5 at bottom page 4 to top Page 5. The Applicant respectfully disagrees and traverses the stated grounds for rejection.

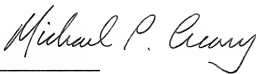
Firstly, such a modification would not be obvious because it would be redundant. Lafforgue '892 already claims to achieve a fit "without play" between its drive piece 3 and corresponding cavity 2, which both have the shape of an oblong truncated cone. Lafforgue '892 col. 2 lines 7-10. Furthermore, piece 3 is radially retained by ring 13. Id. at lines 14-18. Thus, the Examiner's suggested press fit would appear redundant and an unnecessary complication to the assembly.

Secondly, Lafforgue '892 teaches away from the proposed press fit modification in view of Bailey '820. As noted above, in the arguments regarding the independent claims, the Lafforgue '892 drive piece 3 is intended to be readily interchangeable and/or replaceable by the workman "manually" and/or "without specific equipment." Lafforgue '892 col. 3 lines 28-38. To this end, Lafforgue holds drive piece 3 in cavity 2 by means of the selectively unlockable arrangement of ring 13, cap 4', disk 14, and spring 9. Id. at col. 3 lines 14-18. Therefore, to press fit drive piece 3 into the cavity 2 of Lafforgue's tool holder 1 would defeat one of the stated functions and advantages of the cited reference and is thus not obvious.

CONTINUED ON THE NEXT PAGE

Thus, the Applicant respectfully submits that the grounds for rejection have been traversed both for all four independent claims 1, 12, 17, and 22 and for the grounds of rejection particular to dependent claim 6. Therefore, the Applicant elects not to individually address the other independent claims or the particular rejection of dependent claims 8 and 19 at Para. 6 of the Action.

Respectfully submitted

A handwritten signature in black ink that reads "Michael P. Leary". The signature is written in a cursive, flowing style.

Michael P. Leary
Registration No. 41,144
Attorney for Applicant(s)
August 13, 2007

Michael Leary - TW199
The Black & Decker Corporation
701 East Joppa Road
Towson, Maryland 21286
Telephone: (410) 716-2773